

METHODS AND APPARATUS FOR DESIGN ENTRY AND SYNTHESIS OF DIGITAL CIRCUITS

Abstract of the Disclosure

5 Methods and apparatus are provided for design entry and synthesis of
components, such as components implemented on a programmable chip. In one
example, a design tool receives natural or intuitive parameters describing
characteristics of a component in a design. Natural or intuitive parameters include
input data rate, output latency, footprint, etc. Non-natural or non-intuitive parameters
10 such as clock rate and pipeline stages need not be provided. The design tool
automatically selects optimal components using natural parameters. Multiple
instantiations of an optimal component, or multiplexing through an optimal
component can be used to further improve the design.

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